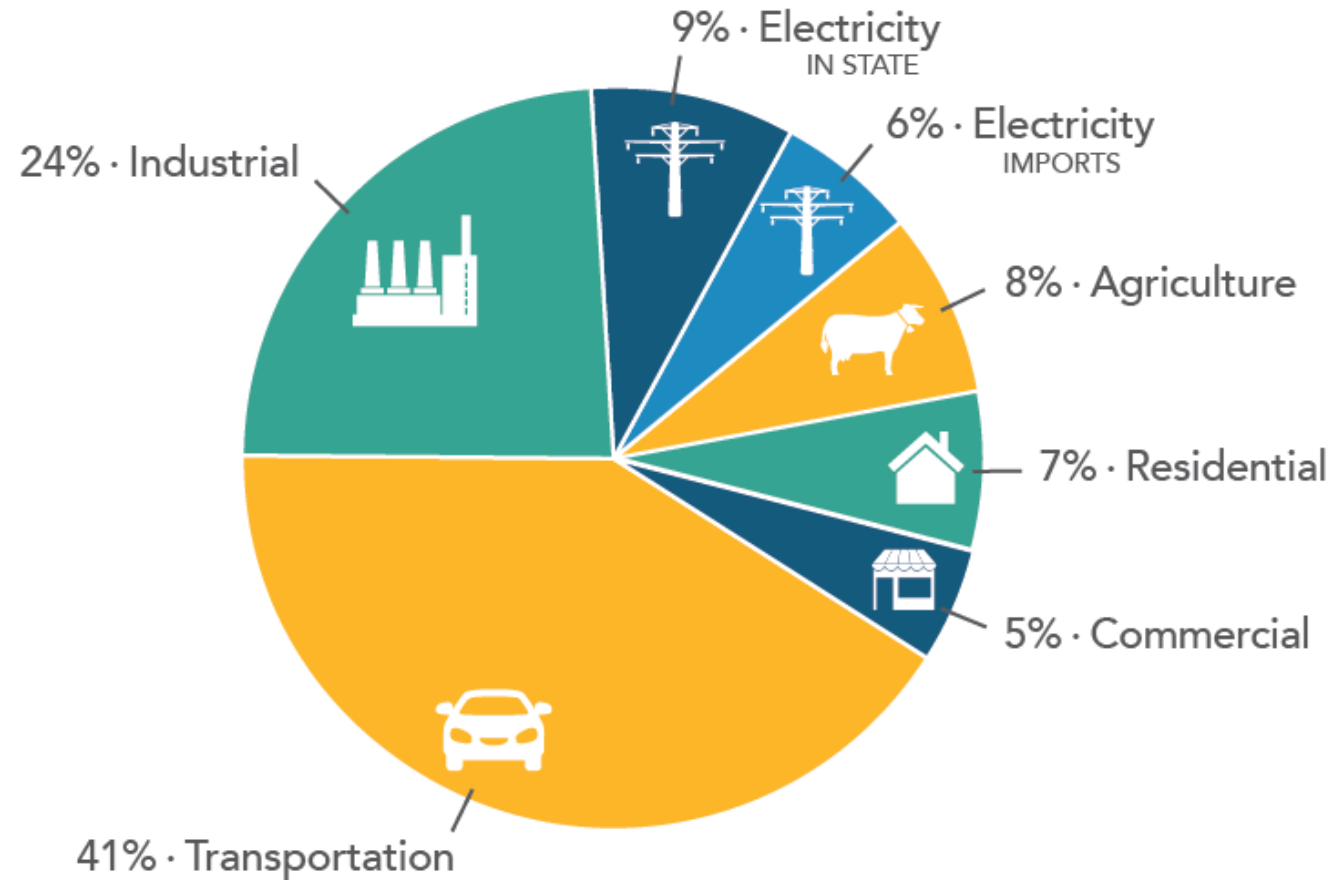


# Planet-Smart Dairy



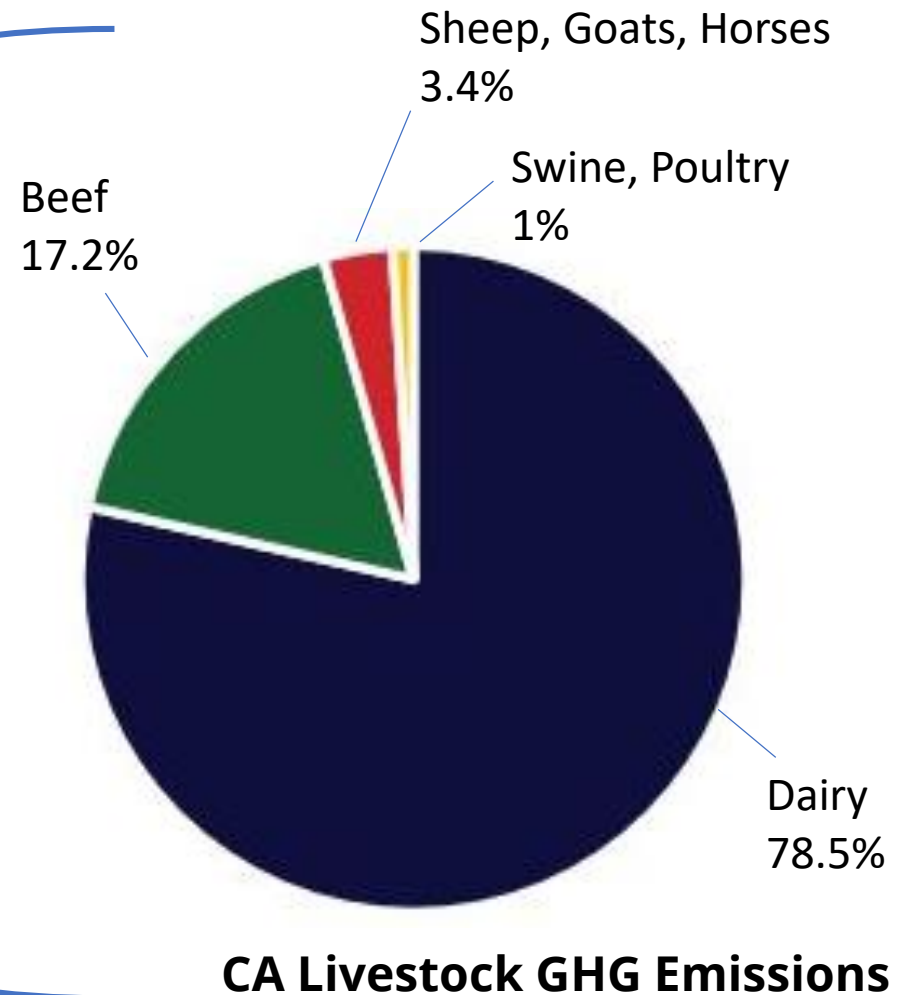
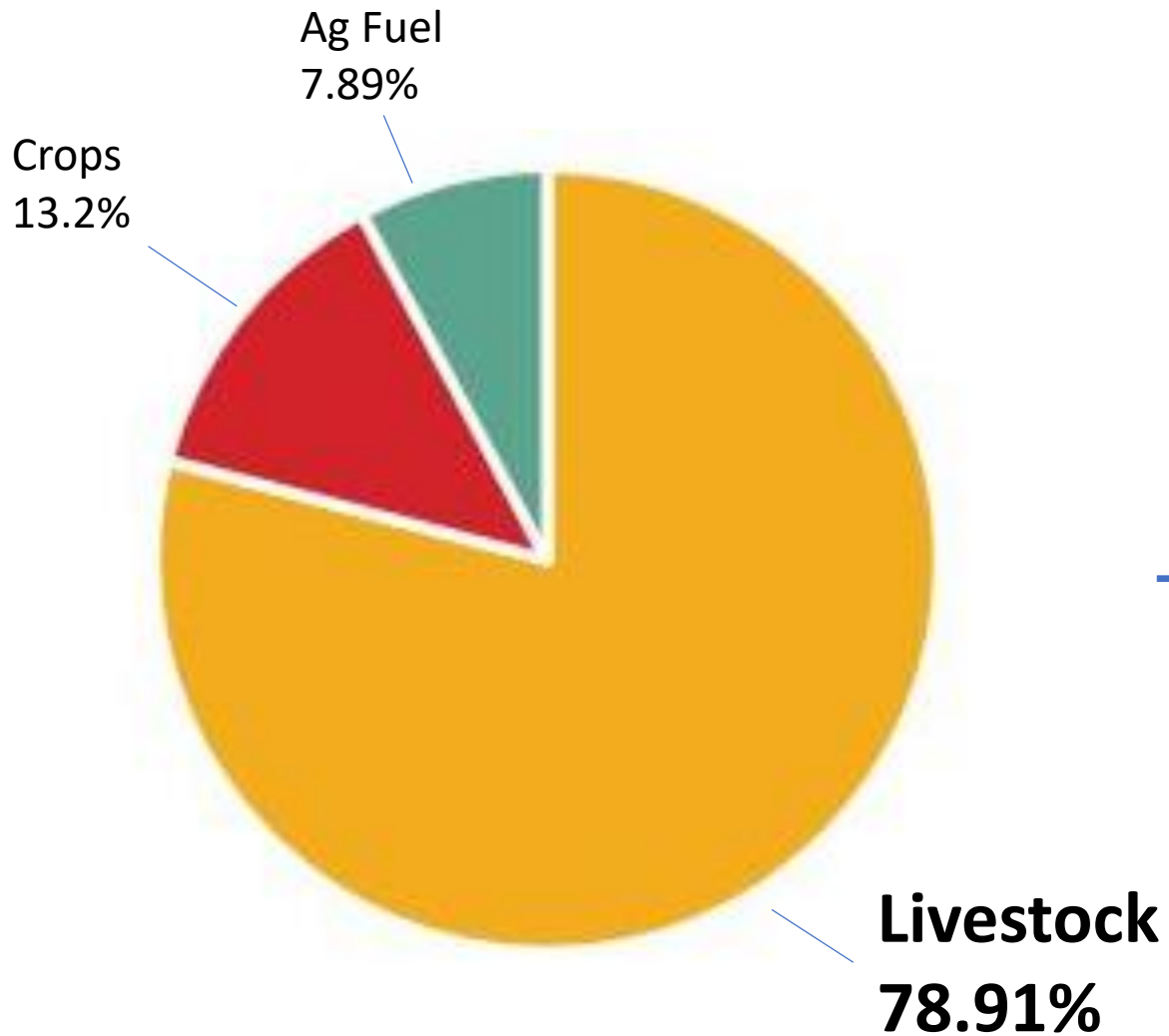
**Dairy Methane Reduction:** California's Approach and Progress to Date

# CA GHGs in Perspective



424.1 MMTCO<sub>2</sub>e  
2017 TOTAL CA EMISSIONS

# CA Agriculture GHG Emissions

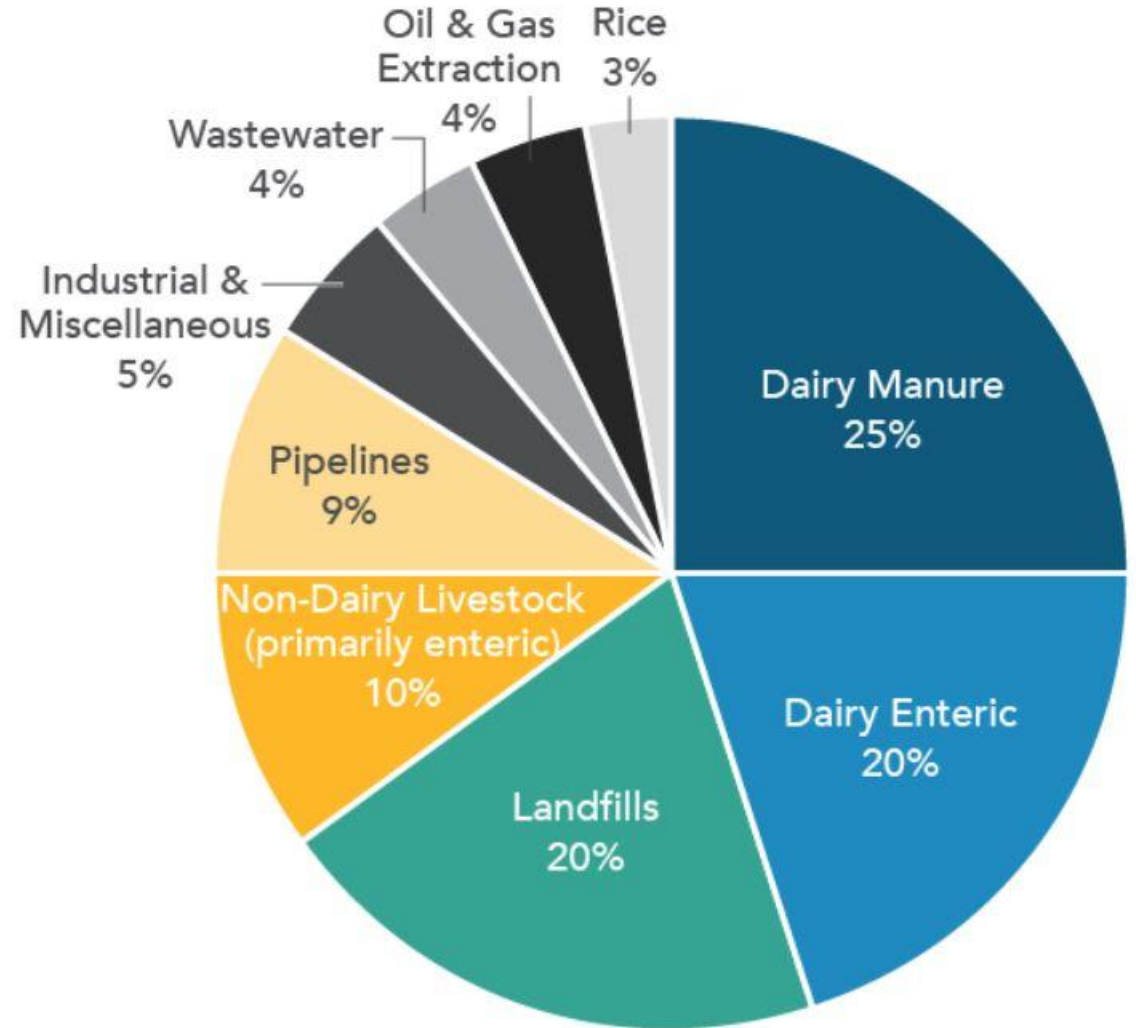




# Methane in Perspective

2013 Methane: 118 MMTCO<sub>2</sub>e (20-yr GWP)

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# Targeting Short-Lived Climate Pollutants

Senate Bill 1383 (2016, Lara)

40% Reduction of Methane by 2030







## **Collaborative, Incentive-Based Approach**

No Regulation Till 2024

Focus on Manure  
Methane

**Pictured Left to Right:**

Dairy Farmer, Eric Te Velde

CDFA Secretary, Karen Ross

Senate Bill 1383 Author Ricardo Lara







# Strategies for Reducing Dairy Methane

**Digesters**



**Alternative  
Manure  
Management**



**Research**





# Tremendous Investment

## Collectively Approaching \$1 Billion



# Multiple Policies Supporting Methane Reduction

**Grant  
Funding**



**Procurement/  
Program  
Support**



**Dairy Farm  
/ Private  
Investment**



CA Dept. of Food & Agriculture

CA Energy Commission

CA Public Utilities Commission

BioMAT

Low Carbon Fuel Standard

RNG Procurement

Interconnection Assistance



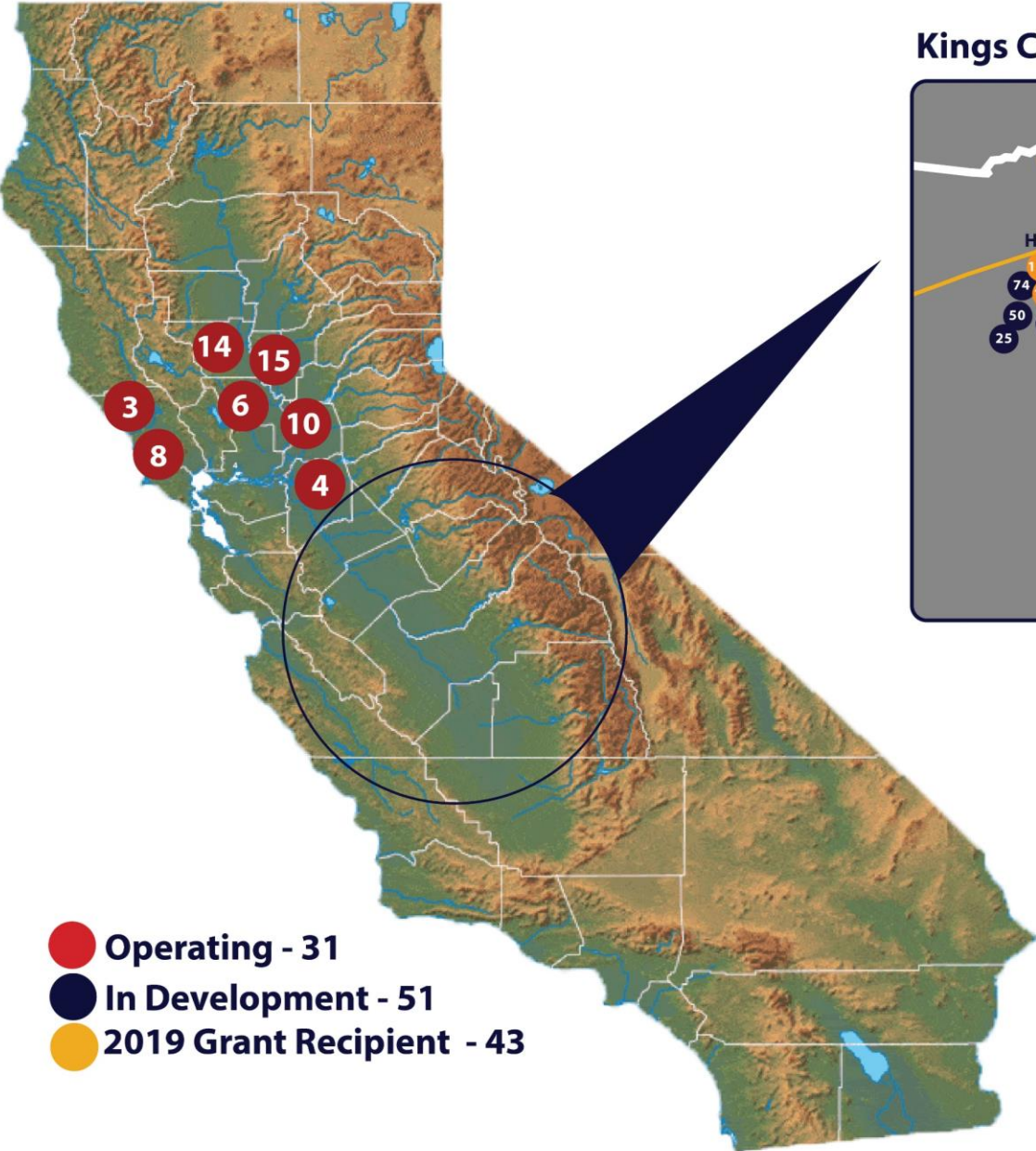
# Tremendous Progress

An aerial photograph of a vast agricultural facility during sunset. The scene features several long, parallel greenhouses with white roofs, a large rectangular pond reflecting the golden light of the setting sun, and rows of dark, covered agricultural beds. In the background, a range of mountains is visible under a sky with soft, wispy clouds. The overall atmosphere is one of industrial scale and natural beauty.

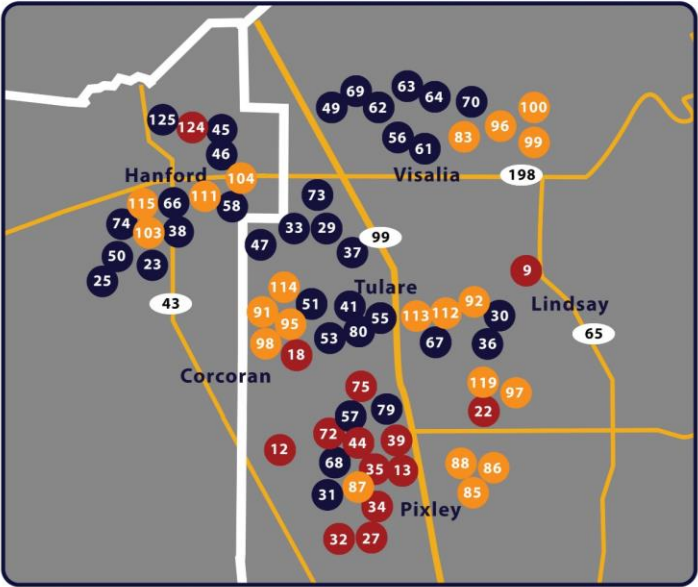
135 by 2024  
200 by 2030



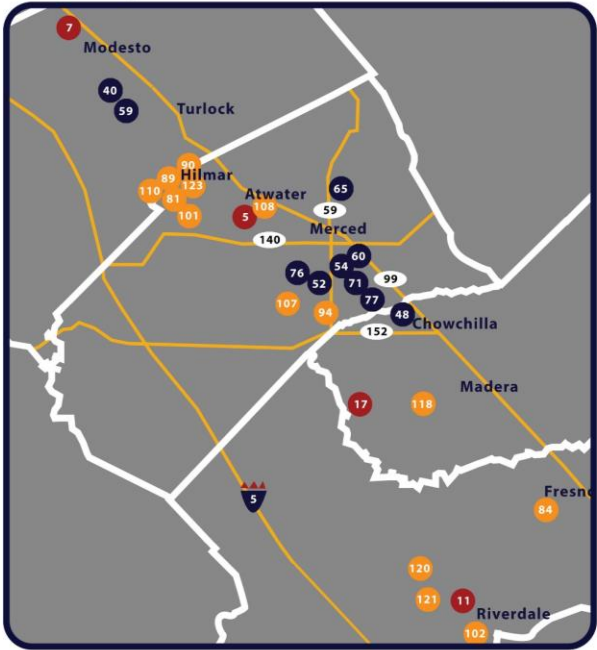
# California Dairy Digester Development



Kings County (16) & Tulare County (55)



Stanislaus County(3), Merced County (17), Madera County (3),



Kern County (19)





# More than Methane Reduction



60 Million DGE



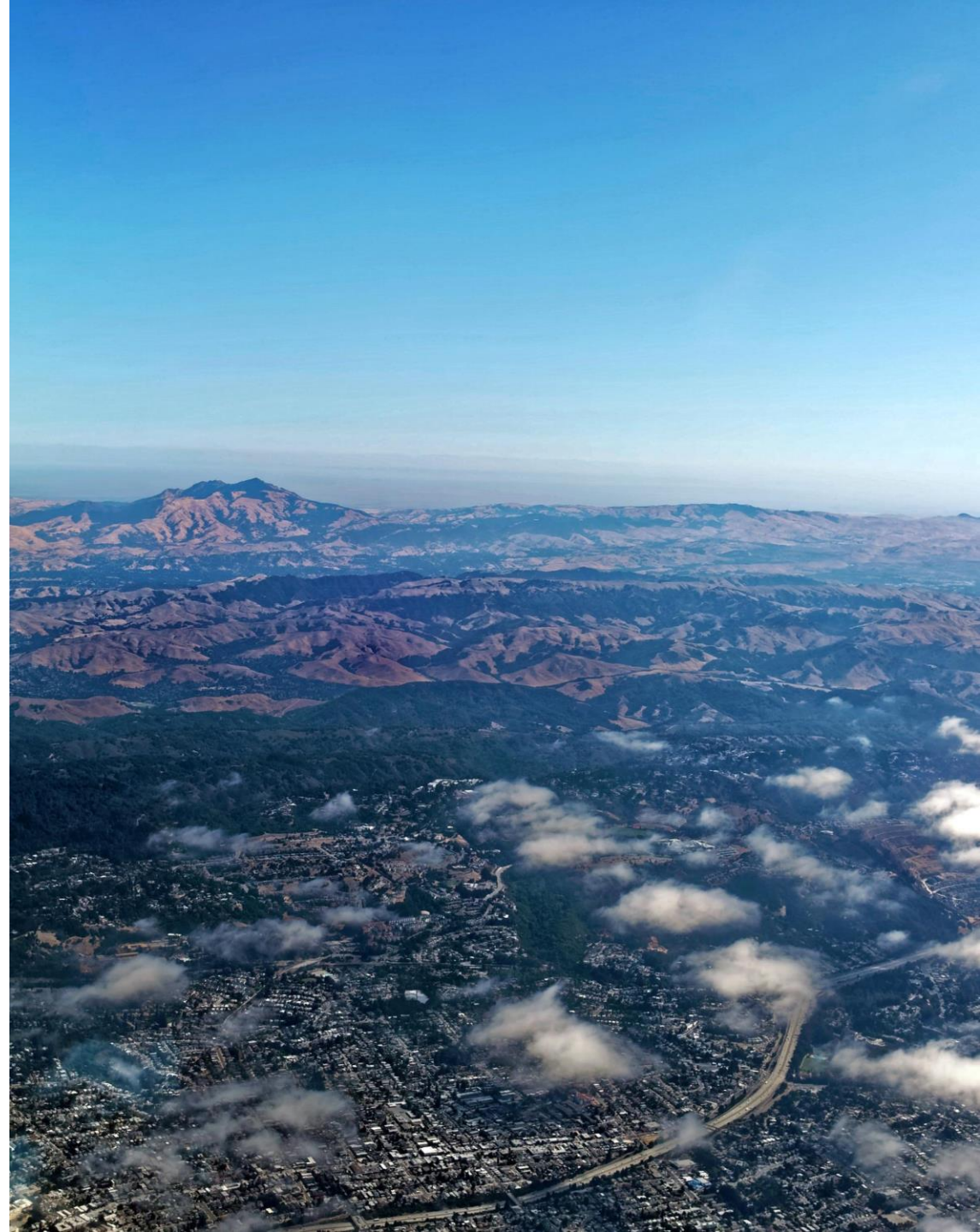
Electric Vehicle Charging





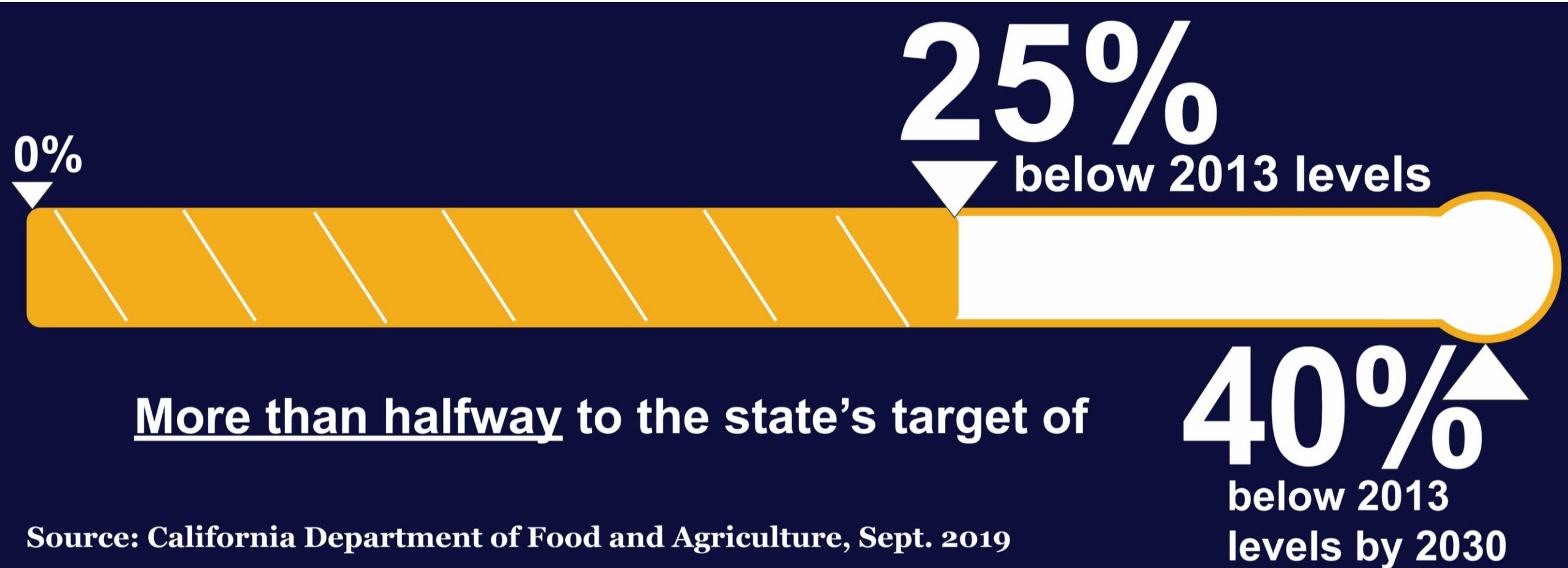
# More than Methane Reduction

- ↓ Nitrous Oxide (NO<sub>x</sub>)
- ↓ Volatile Organic Compounds (VOC)
- ↓ Ammonia (NH<sub>3</sub>)
- ↓ Hydrogen Sulfide (H<sub>2</sub>S)
- ↑ Water Quality Benefits





# Progress to Date



# For More Information at DairyCares.com



## Resources

Learn more about the Dairy Digester Research and Development Program in the [2019 Annual Report](#) to the Legislature on California Climate Investments Using Cap-and-Trade Auction Proceeds. You can also download the following resources.

[CDFA Press Release](#)[Radio Interview](#)[Climate-Smart Dairy Report](#)[DDRDP/AMMP Infographic](#)[One-Page Overview](#)

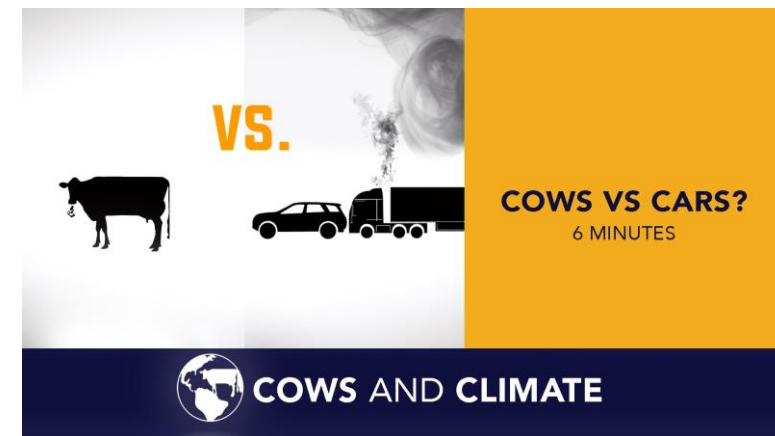
Learn about the state's dairy methane reduction efforts, including [alternative manure management practices](#).

[CA Digester Map](#)

Explore the print-friendly map.

[Digesters & Air Overview](#)[Digester Co-Benefit Infographic](#)

Learn how California's dairy digesters are helping improve air quality.



## Cows & Climate Videos

## YouTube.com/DairyCares